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EXAMINER

PATEL, KINARI M

ART UNIT	PAPER NUMBER
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2654

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10

Please find below and/or attached an Office communication concerning this application or proceeding.

2

# Office Action Summary

Application No.

09/656,225

Applicant(s)

KIVIMAKI, MIKA

Examiner

Kinari Patel

Art Unit

2654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 15 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-28 and 30-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 and 30-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 September 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-4, 8, 10, 12, 20, 25-27, 30-32, and 35 are rejected under 35 U.S.C. 102(e) as being anticipated over Kurzweil et al. (US Patent No. 5,875,428).

As per claim 1, Kurzweil et al. discloses an electronic device comprising:

a user interface having a display for text (column 3, line 25, FIG. 2, 39); and

speech synthesizer means (FIG. 3, 52) including a loudspeaker (column 2, line 46, FIG.

1, 22), arranged to convert an input, dependent upon a text, to an audio output representative of a person reading the text (column 4, lines 16-21); and

control means(column 1, lines 43-62: the computer program is the control means), for controlling the display (column 3, lines 25-27) and for providing an input to the speech synthesizer means (column 4, lines 6-7 and lines 18-21), arranged to control the display of a text (column 3, lines 25-27), to provide an input corresponding to the displayed text to the speech

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synthesizer (column 4, lines 6-7 and lines 18-21), and to highlight a portion or portions of the displayed text (column 4, line 5-6 and lines 20-23, column 5, lines 52-55), wherein the highlighting of a text portion is delayed with respect to the audio output corresponding to the text portion (column 5, lines 54-55, line 66-67 and column 6, lines 1-6: the word is not highlighted until the word is read aloud to the user).

As per claims 26, 27, 30, 31, and 32, they are interpreted and rejected for the same reasons as set forth above in the rejection of claim 1.

As per claim 2, Kurzweil et al. discloses a device as claimed in claim 1 wherein the control means synchronizes the highlighting with the conversion of text to audio output (column 5, line 52-55).

As per claim 3, Kurzweil et al. discloses a device as claimed in claim 1 wherein the control means varies the highlighting with the conversion of the text audio output (column 5, lines 60-63: the color is varied).

As per claim 4, Kurzweil et al. discloses a device as claimed in claim 1, wherein the control means extends the highlighting through the displayed text with the conversion of text to audio output (column 5, lines 66-67 and column 6, lines 1-13: the highlighting is not only a word, but also a sentence or paragraph).

As per claim 8, Kurzweil et al. discloses a device as claimed in claim 1, wherein the control means highlights a text portion for a limited duration (column 5, lines 66-67 and column 6, lines 5-13: the highlighting process remains in a state until an event occurs).

As per claim 10, Kurzweil et al. discloses a device as claimed in claim 1, wherein the dimension of the highlighted portion is variable (column 6, lines 8-10: a unit can be a word, line, or sentence).

As per claim 12, Kurzweil et al. discloses a device as claimed in claim 1, wherein the display displays the full sentence of text being converted (column 6, lines 10-13: the highlighting process checks whether a unit of text has been completed rather than only displaying a partial unit, which may be a sentence).

As per claim 20, Kurzweil et al. discloses a device as claimed in claim 1, wherein the highlighting may comprise anyone of: contrast variation of the text and/or display background (column 6, lines 59-63); color variation of the text and/or display background (column 6, lines 59-63); and reformatting of the text including underscoring, bold font, italic font, capitalization, changing font size or type; and enclosing text in geometric shapes (column 6, lines 59-63).

As per claim 25, Kurzweil discloses a device as claimed in claim 1, wherein the electronic device is a document reader or a hand-held communications device (abstract: a computer and storage device may be a document reader or a hand-held communications device).

As per claim 35, Kurzweil discloses a device as claimed in claim 2, wherein the control means varies the highlighting with the conversion of text to audio output (column 5, lines 60-63: the color is varied).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5-7, 9, 11, 13, 16-19, 21-24, 28, 33-34, and 36-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kurzweil et al. (US Patent No. 5,875,428).

As per claim 5, Kurzweil et al. discloses a device as claimed in claim 4. Kurzweil et al. fails to disclose the device of claim 4 wherein the extending of highlighting through a text portion lags the conversion of the text portion to audio output by the delay. The aforementioned feature is obvious in the art. By lagging the highlighting through a text portion, more emphasis may be placed on the highlighted text since the user will first hear the audio portion, and then be able to visual the audio signal immediately after. Many obvious alterations of how and when the text can be highlighted can be applied to the present invention. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the electronic device of claim 4, wherein the extending of highlighting through a text portion lags the

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conversion of the text portion to audio output by the delay for the purpose of emphasis by repetition.

As per claim 6, Kurzweil et al. discloses a device as claimed in claim 4. Kurzweil et al. fails to disclose the device of claim 4 wherein the control means unselectively extends the highlighting through all of the text. The aforementioned feature is obvious in the art. Highlighting all of the text enables the device to emphasize all the contents of the display rather than a single portion, which can be desirable in some instances, for example, if the user is visually impaired. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of claim 4, wherein the control means unselectively extends the highlighting through all of the text for the purpose of emphasizing the entire text.

As per claim 7, Kurzweil et al. discloses a device as claimed in claim 4. Kurzweil et al. fails to disclose the device of claim 4 wherein the highlighting extends discontinuously by portions of text corresponding to a word or words. The aforementioned feature is obvious in the art. Highlighting the text discontinuously allows emphasis to be placed on select words to facilitate comprehension of only the important sections of the text at hand, just as any student would only highlight specific sections of a page. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of claim 4 wherein the highlighting extends discontinuously by portions of text corresponding to a word or words for the purpose of facilitating comprehension of select text.

As per claim 9, Kurzweil et al. discloses a device as claimed in claim 8. Kurzweil fails to disclose the device of claim 8 wherein the highlighting isolates a portion or portions of text from a body of text, the initiation of the isolation of text lagging the conversion of the text to audio output by the delay and the isolation being maintained for the limited duration. The aforementioned feature is obvious in the art. Highlighting a portion or portions of text from a body of text allows the device to only place emphasis on certain portions of the text. Highlighting only a portion or portions of text after the conversion of text to audio provides the user with greater emphasis on the highlighted text, since the information is fed twice to the user – once audibly, then visually. Furthermore, highlighting only a portion or portions of text for a limited duration allows the user to continue reading the rest of the text. It is well known and obvious to perform these features are performed physically, in the “real world,” so it is apparent that these features can also be performed virtually, on an electronic display. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of claim 8 wherein the highlighting isolates a portion or portions of text from a body of text, the initiation of the isolation of text lagging the conversion of the text to audio output by the delay and the isolation being maintained for the limited duration for the purpose of placing emphasis on only certain portions of the text for a certain amount of time.

As per claim 11, Kurzweil et al. discloses a device as claimed in claim 1. Kurzweil fails to disclose the device of claim 1 wherein the dimension of the highlighted portion is a constant number of words long. The aforementioned feature is obvious in the art. Highlighting only a set



number of words each time provides predictability and consistency in the manner of highlighting, so that the user can comprehend the text in chunks rather than in its entirety. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of claim 1 wherein the dimension of the highlighted portion is a constant number of words long for the purpose of predictability and consistency in the manner of highlighting.

As per claim 13, Kurzweil et al. discloses a device as claimed in claim 1. Kurzweil et al. fails to disclose the device of claim 1 wherein the display displays the previous predetermined plurality of words that have been converted. The aforementioned feature is obvious in the art. Displaying the previous predetermined plurality of words that have been converted allows the reader to go back to a previous section for reference in the event that the user did not fully comprehend the previous section, and would like to reread the section. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of claim 1 wherein the display displays the previous predetermined plurality of words that have been converted for the purpose of providing a reference to the user.

As per claim 16, Kurzweil et al. discloses a device as claimed in claim 1. Kurzweil et al. fails to disclose the device of claim 1 wherein the control means is arranged to identify proper nouns in the text, and highlight them. The aforementioned feature is obvious in the art. Identifying proper nouns in the text and highlighting them allows the reader to quickly spot information that may be suited for a particular purpose, such as people's names, or places.

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the electronic device of claim 1 wherein the control means is arranged to identify proper nouns in the text, and highlight them for the purpose of allowing quick recognition of information that may be deemed to be important.

As per claim 17, Kurzweil et al. discloses a device as claimed in claim 16. Kurzweil et al. fails to disclose the device of claim 16 wherein the control means provides different highlighting for the proper nouns in the text. The aforementioned feature is obvious in the art. Providing different highlighting for the proper nouns in the text allows the reader to quickly spot information that may be suited for a particular purpose, such as people's names, or places. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the electronic device of claim 1 wherein the control means provides different highlighting for the proper nouns in the text for the purpose of allowing quick recognition of information that may be deemed to be important.

As per claim 18, a device as claimed in claim 1, wherein the speech synthesizer means provides signals to the control means to effect the highlighting of specific words. The aforementioned feature is obvious in the art. The speech synthesizer can detect what type of words are important, and subsequently signal that those words should be highlighted. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of claim 1 wherein the speech synthesizer means provides signals to the

control means to effect the highlighting of specific words for the purpose of emphasizing words that the user may find important.

As per claim 19, Kurzweil et al. discloses a device as claimed in claim 18. Kurzweil et al. fails to disclose the device of claim 18 wherein the control means provides different highlighting to the specific words. The aforementioned feature is obvious in the art. Providing different highlighting for different words allows emphasis to be on different words depending on their context. Moreover, Kurzeil discloses highlighting a selected sentence with a first transparent color, and highlighting each individual word as the word is spoken through the speech synthesizer with a second different transparent color (column 5, lines 60-63). Two different colors are used to emphasis different things so different highlighting to specific words is used. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of claim 18, wherein the control means provides different highlighting to the specific words for the purpose of emphasizing different words depending on their context.

As per claim 21, Kurzweil discloses a device as claimed in claim 1. Kurzweil fails to disclose a device as claimed in claim 1 wherein the delay corresponds to a number of converted words or syllables. The aforementioned feature is obvious in the art. Since the medium at hand in a display for text, and units that make up the text are words, a delay that correspond to a number of converted words or syllables is appropriate. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device as claimed in

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claim 1 wherein the delay corresponds to a number of converted words or syllables for the purpose of highlighting the appropriate unit in a text document suitable to the rate at which a user can comprehend the emphasis.

As per claim 22, Kurzweil et al discloses a device as claimed in claim 1. Kurzweil et al. fails to disclose the device of claim 1 wherein the delay corresponds to a fixed time. The aforementioned feature is obvious in the art. Delaying the highlighting by a fixed time allows the highlighting to be systematic in the amount of emphasis placed on the text. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of claim 1 wherein the delay corresponds to a fixed time for the purpose of providing a consistent methodology to placing emphasis on the text.

As per claim 23, Kurzweil et al. discloses a device as claimed in claim 1. Kurzweil et al. fails to disclose the device of claim 1 wherein the delay is greater than 0.1 seconds. The aforementioned feature is obvious in the art. Delaying the highlighting by more than 0.1 seconds allows a quick emphasis to be placed on the visual text. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of claim 1, wherein the delay is greater than 0.1 seconds for the purpose of immediately placing visual emphasis on the text that was heard by the user.

As per claim 24, Kurzweil et al. discloses a device as claimed in claim 1. Kurzweil et al. fails to disclose the device of claim 1 wherein the delay is less than 3 seconds. The

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aforementioned feature is obvious in the art. Delaying the highlighting by less than 3 seconds allows emphasis to be placed on the visual text at a moderate pace. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of claim 1, wherein the delay is less than 3 seconds for the purpose of placing visual emphasis on the text that was heard by the user in a steady fashion.

As per claim 28, Kurzweil et al. discloses  
a display for displaying text (column 3, line 25, Fig 2, 39), and  
speech synthesizer means (FIG. 3, 52) including a loudspeaker (column 2, line 46, FIG. 1, 22), arranged to convert and input, dependent upon a text, to an audio output representative of a person reading the text (column 4, lines 16-21); and

control means (column 1, lines 43-62) for controlling the display (column 3, lines 25-27) and for providing an input to the speech synthesizer means (column 4, lines 6-7 and lines 18-21), arranged to control the display of a text (column 3, lines 25-27), to provide an input corresponding to the displayed text to the speech synthesizer (column 4, lines 6-7 and lines 18-21), and to highlight a portion or portions of the displayed text (column 4, lines 5-6 and lines 20-23 and column 5, lines 52-55), wherein the highlighting of a text portion is delayed with respect to the audio output corresponding to the text portion (column 5, lines 54-55, lines 66-67 and column 6, lines 1-6).

Kurzweil fails to disclose a car comprising a hand-held radio communications device which comprises a user interface which includes the features mentioned above. However, it is obvious in the art for a hand-held radio communications device with a user interface to be

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mounted anywhere in a car so that the user can both hear and quickly read emphasized text while his or her attention can not be fully devoted to reading the text because she or he is driving.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Kurzweil et al. wherein it is used in a car comprising a hand-held radio communications device which comprises a user interface for the purpose of allowing a busy driver to quickly comprehend both audio and visual information.

As per claim 33, Kurzweil et al. discloses a device as claimed in claim 31. Kurzweil et al. fails to disclose the device of claim 31 wherein the delay is greater than 0.1 seconds. The aforementioned feature is obvious in the art. Delaying the highlighting by more than 0.1 seconds allows a quick emphasis to be placed on the visual text. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of claim 31, wherein the delay is greater than 0.1 seconds for the purpose of immediately placing visual emphasis on the text that was heard by the user.

As per claim 34, Kurzweil et al. discloses the method for displaying text as claimed in claim 32. Kurzweil et al. fails to disclose the method for displaying text wherein the delay is greater than 0.1 seconds. Delaying the highlighting by greater than 0.1 seconds allows emphasis to be placed on the visual text at a moderate pace. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of claim 32, wherein the delay is greater than 0.1 seconds for the purpose of placing visual emphasis on the text that was heard by the user in a steady fashion.

As per claim 36, Kurzweil et al. discloses a device as claimed in claim 5. Kurzweil et al. fails to disclose a device of claim 5 wherein the extending of highlighting through a text portion lags the conversion of the text portion to audio output by the delay. The aforementioned feature is obvious in the art. By lagging the highlighting through a text portion, more emphasis may be placed on the highlighted text since the user will first hear the audio portion, and then be able to visual the audio signal immediately after. Many obvious alterations of how and when the text can be highlighted can be applied to the present invention. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the electronic device of claim 5, wherein the extending of highlighting through a text portion lags the conversion of the text portion to audio output by the delay for the purpose of emphasis by repetition.

As per claim 37, Kurzweil et al. discloses a device as claimed in claim 5. Kurzweil et al. fails to disclose a device of claim 5 wherein the highlighting extends discontinuously by portions of text corresponding to a word or words. The aforementioned feature is obvious in the art. Highlighting the text discontinuously allows emphasis to be placed on select words to facilitate comprehension of only the important sections of the text at hand, just as any student would only highlight specific sections of a page. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of claim 5 wherein the highlighting extends discontinuously by portions of text corresponding to a word or words for the purpose of facilitating comprehension of select text.

As per claim 38, Kurzweil et al. discloses a device as claimed in claim 6. Kurzweil et al. fails to disclose the device of claim 6 wherein the highlighting extends discontinuously by portions of text corresponding to a word or words. The aforementioned feature is obvious in the art. Highlighting the text discontinuously allows emphasis to be placed on select words to facilitate comprehension of only the important sections of the text at hand, just as any student would only highlight specific sections of a page. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of claim 6 wherein the highlighting extends discontinuously by portions of text corresponding to a word or words for the purpose of facilitating comprehension of select text.

As per claim 39, Kurzweil et al. discloses a device as claimed in claim 36. Kurzweil et al. fails to disclose a device of 36 wherein the highlighting extends discontinuously by portions of text corresponding to a word or words. The aforementioned feature is obvious in the art. Highlighting the text discontinuously allows emphasis to be placed on select words to facilitate comprehension of only the important sections of the text at hand, just as any student would only highlight specific sections of a page. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of claim 36 wherein the highlighting extends discontinuously by portions of text corresponding to a word or words for the purpose of facilitating comprehension of select text.



5. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kurzweil et al (US Patent No 5,875,428) in view of Knowles et al. (US Patent No. 5,065,345).

As per claim 14, Kurzweil et al. discloses all the limitations of the device as claimed in claim 1. Kurzweil et al. fails to disclose the device in claim 1 further comprising: a dictionary, wherein the control means highlights words not in the dictionary. The aforementioned feature is well known in the art as taught by Knowles et al.

Knowles et al. discloses highlighting words that are in the dictionary when displayed on a screen (column 15, lines 32-39). Similarly, the words that are not in the dictionary can be highlighted instead of the words that are in the dictionary. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of claim 1 to include a dictionary, wherein the control means highlights words not in the dictionary for the purpose of allowing a user to learn new material, in an educational environment, for example, as taught by Knowles et al. (column 15, line 39: the lesson).

As per claim 15, Kurzweil et al. as modified by Knowles et al. discloses all the limitations of the device as claimed in claim 14. Kurzweil et al. fails to disclose the device of 14 wherein the control means provides different highlighting for the words not in the dictionary. The aforementioned feature is obvious in the art. Providing different highlighting for words not in the dictionary allows the user to quickly recognize the words that are not in the dictionary and allows the user to learn new material. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of claim 14, wherein the

control means provides different highlighting for the words not in the dictionary for the teaching purposes, as taught by Knowles et al. (column 15, line 39: the lesson).

### ***Response to Arguments***

6. Applicant's arguments filed with respect to claims 1, 26-28 and 30-32 have been fully considered but they are not persuasive.

Regarding claims 1-4, 10, 12, 20, 25-27, 30-32, and 35 Applicant states, "Kurzweil et al. do not teach delayed highlighting."

However, Kurzweil et al. disclose a step in which an event is awaited by the software during the highlighting process. The highlighting process remains in a particular state until an event occurs (Col. 5, Ln. 66-67; Col. 6, Ln. 1-6). This is the equivalent of delayed highlighting.

Regarding claim 2, Applicant states, "There is no disclosure of the delayed synchronized highlighting with the conversion of text to audio output in Kurzweil et al. as recited in claim 2."

However, Kurzweil et al. disclose highlighting a current word that is read aloud to the user (Col. 5, Ln. 54-55). This is exactly the equivalent of synchronized highlighting with the conversion of text to audio output. Delayed highlighting has already been established in claim 1 (Col. 5, Ln. 66-67; Col. 6, Ln. 1-6), above, as Applicant states, "Claim 2 further limits claim 1 in reciting that the control means synchronizes the highlighting with the conversion of text to audio output."

Regarding claim 4, Applicant states, "The fact that the highlighting may be a word, sentence, or paragraph, does not meet the extending the highlighting through the displayed text with the conversion of text to audio output as recited in claim 4."

However, Examiner maintains the argument that highlighting through a sentence or paragraph is the equivalent to extending the highlighting through the displayed text, as taught by Kurweil et al. (Col. 5, Ln. 66-67; Col. 6, Ln. 1-13). Instead of merely highlighting a single word, the highlighted portion is extended through many words, i.e. a sentence or paragraph. The conversion of text to audio output has already been addressed in claim 2 (Col. 5, Ln. 54-55).

Regarding claim 25, Applicant states, "Examiner seems to be reasoning that a computer and storage device referred to in the Abstract may be a document reader or hand-held communications device. This raises an issue of obviousness and not anticipation. Accordingly, the rejection of claim 25 on grounds of anticipation is improper."

However, a computer and storage device referred to in the Abstract is a document reader. Kurzweil et al. teach, "In accordance with the present invention, a computer program for residing on a computer readable medium and for use in a reading machine includes instructions for causing a computer to display an image representation of a scanned document on a computer monitor" (Col. 1, Ln. 43-47). Kurzweil et al. further teach, "A reading machine is shown to include a computer system" (Col. 2, Ln. 32-33, FIG. 1, 10, 12). Therefore, since Kurzweil et al. clearly and explicitly disclose the claimed document reader, the grounds of anticipation remain valid.

Regarding claims 5-7, 9, 11, 13, 16-19, 21-24, 28, 33-34, and 36-39, Applicant states, "Examiner discusses at some length that it is obvious to modify Kurzweil et al. in a manner as recited in the claims. However, it is submitted that the rejection on obviousness is based purely on the Examiner's opinion without any citation of prior art or reasoning on what is well known in the art. Accordingly, the Examiner's stated obviousness of the acknowledged many differences between Kurzweil et al. and the rejected claims is traversed as being based upon impermissible hindsight without objective evidence that the subject matter is obvious."

Regarding claim 15, Applicant states, "Examiner argues that it would be obvious to provide different highlighting for words not in the dictionary. This reasoning is based purely upon the Examiner's opinion without the citation of any relevant prior art. Accordingly, it is submitted that the rejection of claim 15 is erroneous."

However, the test of obviousness is:

"whether the teachings of the prior art, taken as a whole, would have made obvious the claimed invention," as shown in *In re Gorman*, 933 F. 2d at 986, 18 USPQ2d at 1888.

Subject matter is unpatentable under section 103 if it " 'would have been obvious to a person having ordinary skill in the art.' While there must be some teaching, reason, suggestion, or motivation to combine existing elements to produce the claimed device, it is not necessary that the cited references or prior art specifically suggest making the combination," as shown in *In re Nilssen*, 851 F. 2d 1401, 1403, 7 USPQ2d 1500, 1502 (Fed. Cir. 1988).

Such suggestion or motivation to combine prior art teachings can derive solely from the existence of a teaching, which one of ordinary skill in the art would be presumed to know, and

the use of that teaching to solve the same [or] similar problem which it addresses, as shown in *In re wood*, 599 F. 2d 1032, 1037, 202 USPQ 171, 174 (CCPA 1979).

“In sum, it is off the mark for litigants to argue, as many do, that an invention cannot be held to have been obvious unless a suggestion to combine prior art teachings is found *in* a specific reference,” as shown in *In re Oetiker*, 24 USPQ2d 1442 (CAFC 1992).

Accordingly, *Kurzweil et al.* is not required to disclose or specifically suggest particular elements. Instead, the measure is what the teachings of *Kurzweil et al.* would suggest to one of ordinary skill in the art, not what *Kurzweil et al.* specifically suggests.

Regarding claim 14, Applicant states, “There is no basis why a person of ordinary skill in the art would be led to modify the teachings of *Kurzweil et al.* to combine them with *Knowles et al.* for the highlighting of a dictionary except by impermissible hindsight. Moreover, the Examiner’s conclusion that words not in the dictionary can be highlighted instead of words in a dictionary is based on impermissible hindsight.”

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kinari Patel whose telephone number is 703-305-8487. The examiner can normally be reached on 9 AM - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on 703-305-9645. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

kp



**RICHEMOND DORVIL**  
**SUPERVISORY PATENT EXAMINER**